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**Interim Guidance for Operators on Handling
Products Containing Mercury
at Conditionally Exempt Recycling Operations**

Effective May 1, 2008



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at Conditionally Exempt Recycling Operations**

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The Massachusetts Mercury Management Act prohibits the disposal of products containing mercury in solid waste. MassDEP will propose regulations to implement this law (310 CMR Chapter 76) and will specify how end-of-life mercury-added products must be managed. MassDEP is planning a campaign to educate Massachusetts residents about the disposal prohibition.

EXAMPLES OF PRODUCTS THAT MAY CONTAIN MERCURY AT END-OF-LIFE

Hazardous Waste	Non-hazardous Waste
<i>These items must be handled as either hazardous waste or as universal waste</i>	<ul style="list-style-type: none">• Green cap fluorescent lamps and low mercury compact fluorescent lamps (CFLs)• Electronic devices with screens that are backlit using a fluorescent lamp, such as:<ul style="list-style-type: none">- Flat panel computer monitors- Flat panel TVs- Handheld gaming devices- Portable DVD players• Some appliances/white goods such as:<ul style="list-style-type: none">- Gas ovens with mercury thermocouple- Chest freezers with tilt switches in lid• Toys containing button cell batteries that are not designed to be removed by the user/parent
<ul style="list-style-type: none">• Bilge pumps and sump pumps (some contain mercury switches)• Button batteries• Electrical switches• Sphygmomanometers• Sphygmomanometers• Thermometers• Thermostats• Tilt switches and mercury thermocouples removed from appliances / white goods• Neon lamps and some fluorescent lamps, such as 4ft straight tubes, u-tubes, circular	
<i>These items must be handled as hazardous waste</i>	
<ul style="list-style-type: none">• Elemental mercury¹• Glass ampoules of mercury removed from devices	
¹ Elemental mercury is not covered by the Mercury Management Act or by 310 CMR 76.00 but is mentioned here to remind facilities that it is hazardous waste	

General Requirements

- End-of-life mercury-added products that are "hazardous waste" must be managed as hazardous waste in accordance with 310 CMR 30.000.
- End-of-life mercury-added products that are "universal waste" must be managed as either hazardous waste in accordance with 310 CMR 30.000 or as universal wastes in accordance with 310 CMR 30.1000.
- End-of-life mercury-added products that are not hazardous waste must be:
 - ✓ Separated from solid waste.
 - ✓ Handled and stored to minimize breakage and release of mercury.
 - ✓ Recycled to reclaim the mercury.

Guidance on Handling Specific Mercury-Added Products

- ***Appliances or White Goods (e.g., ovens and chest freezers)*** – If the appliance has a mercury switch or thermocouple, remove the device and place it in a Universal Waste bucket, or contract with someone who will remove the mercury added component before it is crushed or shredded at a recycling facility.
- ***Bilge or sump pump*** – if the pump has a tethered float switch, assume it has a mercury switch, clip the switch off and place it in Universal Waste bucket. The motor can be recycled or disposed as trash.
- ***Electronic devices with backlit screens (e.g., laptops and flat panel screens)*** – Place with electronics and contract with an electronics recycler that properly manages the mercury components.
- ***Mercury-added lamps (e.g., fluorescent lamps)***
 - Broken** – direct residents with a broken lamp to the MassDEP guidance on cleaning up broken lamps ([link below](#)), and to dispose of the broken lamp with solid waste. Once the lamp is accepted at a conditionally exempt recycling operation it must be managed as universal waste. If a mercury-added lamp breaks on site, ventilate any indoor area and follow the clean up guidance and manage the broken lamp as universal waste.
 - Intact** – place in Universal Waste container for recycling (including your facility's own fluorescent lamps)
- ***Products containing button cell batteries as its only mercury-added component***
 - Removable (e.g., small electronic game or toy)**– remove button battery and put the battery in container for recycling. The rest of the product can be handled as solid waste.

Irremovable (e.g., flashing toy or novelty) – Facility operators can choose not to accept these products; however, if these products are accepted at the facility they will need to be separated for recycling. By definition, an irremovable button battery is one that is not intended to be replaced by the product user. However, for some products it is possible to separate the battery from the product and recycle the battery. Some products will be covered by a manufacturer's collection plan.

- *Sphygmomanometer (blood pressure cuff)* - place in Universal Waste bucket.

Thermostat – place in Thermostat Recycling Corporation (TRC) box or in Universal Waste bucket.

Notes:

In order to reduce recycling and disposal costs, collection center staff may separate a component containing mercury (e.g., switches, lamps or batteries) from a larger product, or may choose to recycle the entire product. However, please note that glass ampoules removed from products, such as thermostats, must be handled as hazardous waste.

All mercury items set aside at the facility must be sent to a facility that properly manages mercury components.

For More Information

- Mercury recycling facilities in the northeastern United States are listed on MassDEP's web site:
www.mass.gov/dep/toxics/stypes/hgcycle.htm
- Handling of universal waste, please refer to the fact sheet on MassDEP's web site:
www.mass.gov/dep/recycle/hazardous/univrule.doc or
www.mass.gov/dep/recycle/hazardous/univrule.pdf
- Guidance on cleaning up mercury spills:
www.mass.gov/dep/toxics/stypes/spill.htm
- Guidance on cleaning up broken compact fluorescent light bulbs:
www.mass.gov/dep/toxics/stypes/brkncfls.htm